

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1-4, 7, 15, 18 and 20 in accordance with the following:

1. (currently amended) A high voltage transformer, comprising:
a core that is surrounded by a plurality of coils to boost an alternating current voltage, and that is grounded;
~~an~~ output terminals that outputs the voltage boosted by the plurality of coils; and
an insulation member ~~that is disposed~~ vertically positioned and fixed between the output terminals and the core at a predetermined distance away from the core.
2. (currently amended) The high voltage transformer as set forth in claim 1, wherein the output terminals ~~is~~ are connected to a secondary coil, and
wherein the plurality of coils include a primary coil and the secondary coil connected to a low voltage side and a high voltage side of the high voltage transformer, respectively.
3. (currently amended) The high voltage transformer as set forth in claim 1, wherein the insulation member allows an insulation distance between the output terminals and the core to be extended.
4. (currently amended) The high voltage transformer as set forth in claim 3, wherein the insulation distance is a roundabout distance which is a total sum of a distance extending from the output terminals to a top of the insulation member and a straight-line distance between the output terminals and ~~to the core in a roundabout manner~~, the roundabout distance being greater than a the straight-line distance between the output terminals and the core.
5. (original) The high voltage transformer as set forth in claim 1, wherein the insulation member has a form of a plate.
6. (original) The high voltage transformer as set forth in claim 1, wherein the insulation member is perpendicular to a winding direction of the plurality of coils.

7. (currently amended) The high voltage transformer as set forth in claim 1, further comprising a terminal support that fixes the output terminals thereon, wherein the insulation member is interposed between the terminal support and the core.

8. (original) The high voltage transformer as set forth in claim 7, wherein the terminal support includes insulating paper.

9. (original) The high voltage transformer as set forth in claim 1, wherein the insulation member includes a resin having properties of electrical insulation and heat resistance.

Claims 10-14 (canceled)

15. (currently amended) A high voltage transformer, comprising:
a core electrically connected to a potential;
a primary coil surrounding the core, the primary coil being connected to a low voltage portion of the high voltage transformer;
a secondary coil disposed near the primary coil, the secondary coil being connected to a high voltage portion of the high voltage transformer;
an insulating terminal support attached to the secondary coil;
an output terminal mounted on the insulating terminal support; and
an insulation member disposed vertically positioned and fixed between the secondary coil and the output terminal,
wherein the insulation member effectively extends an electromagnetic distance between the output terminal and the secondary coil.

16. (original) The high voltage transformer as set forth in claim 15, further comprising:
first and second insulating papers covering first and second sections of the secondary coil, respectively,
wherein the second insulating paper is disposed between the secondary coil and the insulation member.

17. (original) The high voltage transformer as set forth in claim 16, further comprising:
a heater coil; and
a third insulating paper covering the first and second insulating papers, wherein the third insulating paper is disposed between the secondary coil and the heater coil.

18. (currently amended) A high voltage transformer, comprising:
a laminated E core having at least one prong surrounded by a plurality of coils to boost an alternating current voltage, the laminated E core being connected to a potential;
a laminated I core in contact with the at least one prong of the laminated E core;
an output terminal that outputs the voltage boosted by the plurality of coils; and
an insulation member ~~disposed vertically positioned and fixed~~ between the output terminal and the laminated E core at a predetermined distance away from the laminated E core.

19. (original) The high voltage transformer as set forth in claim 18, wherein the insulation member effectively extends an insulation distance between the output terminal and the laminated E core.

20. (original) The high voltage transformer as set forth in claim 18, wherein the insulation distance is a roundabout distance which is a total sum of a distance extending from the output terminal to a top of the insulation member and a straight-line distance between the output terminal to and the laminated E core ~~in a roundabout manner~~, the roundabout distance being greater than a the straight-line distance between the output terminal and the laminated E core.